THE WATER PLANNING PROGRAM

he Idaho State Water Plan was adopted by the Idaho Water Resource Board to guide the development, management, and use of the state's water and related resources. The plan recognizes past actions, addresses present conflicts and opportunities, and seeks to ensure that future water resource planning will best serve the citizens of Idaho. The plan is subject to change so as to be responsive to new opportunities and needs.

Constitutional Authority

Article XV, Section 7 of the Idaho Constitution provides the authority for the preparation of a State Water Plan. This constitutional amendment was adopted in November 1964 following a statewide referendum and states:

There shall be constituted a Water Resource Agency, composed as the Legislature may now or hereafter prescribe, which shall have power to formulate and implement a state water plan for optimum development of water resources in the public interest; to construct and operate water projects; to issue bonds, without state obligation, to be repaid from revenues of projects; to generate and wholesale hydroelectric power at the site of production; to appropriate public waters as trustee for Agency projects; to acquire, transfer and encumber title to real property for water projects and to have control and administrative authority over state land required for water projects; all under such laws as may be prescribed by the Legislature.

Article XV, Section 3 of the Idaho Constitution provides for the appropriation and allocation of water. Section 3 provides that:

The right to divert and appropriate the unappropriated waters of any natural stream to beneficial uses, shall never be denied, except that the state may regulate and limit the use thereof for power purposes.

Priority of appropriation shall give the better right as between those using the water; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall (subject to such limitations as may be prescribed by law) have the preference over those claiming for any other purpose; and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes. And in any organized mining district those using the water for mining purposes or milling purposes connected with mining have preference over those using the same for manufacturing or agriculture purposes.

But the usage by such subsequent appropriators shall be subject to such provisions of law regulating the taking of private property for public and private use, as referred to in section 14 of article I of this Constitution.

Although no legal confrontations have occurred, Section 7 probably tempers Section 3 in that future water development must be guided by the State Water Plan.

Legislative Authority

Article XV, Section 7 of the Idaho Constitution called for the creation of a "Water Resource Agency" but did not establish the agency. In 1965, the 38th Legislature established the Idaho Water Resource Board, and directed that (as amended):

The Idaho Water Resource Board shall, subject to legislative approval, progressively formulate, adopt and implement a comprehensive state water plan for conservation, development, management and optimum use of all unappropriated water resources and waterways of this state in the public interest.

Idaho Code 42-1734A(1)

To assist the Idaho Water Resource Board, the Legislature provided for the director of the Department of Water Resources:

To perform administrative duties and such other functions as the Board may from time to time assign to the Director to enable the Board to carry out its powers and duties.

Idaho Code 42-1805(6)

Article XV, Section 7 was amended by the electorate during the general election of November 6, 1984. This modification provides that:

The Legislature of the State of Idaho shall have the authority to amend or reject the state water plan in a manner provided by law. Thereafter any change in the state water plan shall be submitted to the Legislature of the State of Idaho upon the first day of a regular session following the change and the change shall become effective unless amended or rejected by law within sixty days of its submission to the Legislature.

Legislation in 1988 provided for the development of a "comprehensive state water plan" and authorized designation of highly-valued waterways as state protected rivers. Each comprehensive basin or water body plan is prepared within the policies of and becomes a component of Idaho's State Water Plan.

Chapter 17 of Title 42, Idaho Code, was amended in 1988. In part, the amendments renamed the State Water Plan as the Comprehensive State Water Plan Part A. Plans developed for specific geographic areas became components of the Comprehensive State Water Plan Part B.

The board may develop a comprehensive state water plan in stages based upon waterways, river basins, drainage areas, river reaches, ground-water aquifers, or other geographic considerations.

Idaho Code 42-1734A(2)

As part of the comprehensive state water plan, the board may designate selected waterways as protected rivers as provided in this chapter.

Idaho Code 42-1734A(1)

The authority to designate "protected rivers" derives from the state's power to regulate activities within a stream bed including stream channel alterations, water diversions, the extraction of minerals or other commodities, and the construction of impoundments.

Idaho Water Resource Board Programs

- 1. Formulate and implement the State Water Plan.
- 2. Provides financial assistance for water development and conservation projects in the form of revenue bonds, loans, and grants.
- 2. Implementation of legislative directives such as the aquifer recharge program established by the 1995 Idaho Legislature.
- 3. Adopts rules for:
 - * Well Construction
 - * Well Drillers Licenses
 - * Construction and Use of Injection Wells
 - * Drilling for Geothermal Resources
 - * Mine Tailings Impoundment Structures
 - * Safety of Dams
 - * Stream Channel Alterations

The Department of Water Resources administers these programs.

- 4. Hears appeals of Department of Water Resources administrative decisions regarding programs administered under Idaho Water Resource Board rules.
- 5. Administers the Idaho Water Supply Bank.

- 6. At the request of the Governor, appears on behalf of and represents the state in proceedings, negotiations, or hearings involving the federal government, Indian tribes or other states
- 7. File applications and obtain permits to appropriate, store, or use unappropriated waters, and acquire water rights subject to the provisions of applicable law.
- 8. Investigate, undertake, or promote water projects deemed to be in the public interest.
- Cooperate and enter into contracts with federal, state and local governmental agencies for water studies, planning, research, or activities.
- 10. Study water pollution and advise the state board of environmental quality regarding the establishment of water quality criteria.
- 11. Formulate and recommend legislation for water resource conservation, development, and utilization.

State Water Plan Formulation

Formulation of a State Water Plan is a dynamic process. Adoption of The State Water Plan - Part One, *The Objectives*, in 1974, and *The State Water Plan* - Part Two in 1976, provided an initial State water policy. Implementing the policies in Part Two required the combined efforts of government agencies, the legislature, private concerns and the public. Consequently, the plan delineated those areas where legislative action was required, identified the programs to be pursued by the Board, and described the areas where cooperation of public and private interests was necessary.

The State Water Plan was updated and readopted in 1982, 1986, 1992, and 1996. This Plan continues to evolve as an instrument in the adoption and implementation of policies, projects, and programs that develop, utilize, conserve, and protect the state's water supplies. Changes were made in 1985 to reconcile any differences created by the Swan Falls agreement entered into by the State and the Idaho Power Company. The 1986 and 1992 updates involved changes in objectives and policy reorganization

PLANNING PROCESS

The planning process encompasses five steps:

- 1. A comprehensive public involvement program to determine public views and interests regarding resource problems, needs, and potentials as they relate to water;
- 2. An ongoing evaluation of the water and related resource base and an estimate of probable future conditions;
- 3. An evaluation of beneficial and adverse effects of protection and development;
- 4. Adoption of the State Water Plan by the Idaho Water Resource Board as required by Article XV, Section 7 of the Idaho Constitution;
- 5. Approval by the Idaho Legislature as provided by law.

Public involvement is an important part of the planning process, and is necessary in assessing viewpoints and conditions. Scoping meetings, comment periods, and formal hearings, provide opportunity for public input during plan development. After adoption and approval, public comment on the effectiveness of the plan is encouraged.

STATE WATER PLAN

The State Water Plan emerges from a vision of Idaho in which water is used efficiently, and is allocated through laws that fully conform to the prior appropriation doctrine. Water resource planning involves ground water and surface water, recognizing the increasing demands on both.

Objectives

The following objectives of the State Water Plan are formulated for the conservation, development, management and optimum use of all unappropriated water resources and waterways of this state in the public interest [Idaho Code 42-1734A].

- 1. **Water Management** Encourage the quantification of water supply, use, demand and all water rights within the state. Encourage integrated, coordinated, and adaptable water resource management, and the prudent stewardship of water resources. Initiate state protection of waterways or water bodies with outstanding fish and wildlife, recreation, geologic or aesthetic values where protection should take precedence over development.
- 2. **Public Interest** Ensure that the needs and interests of the public are appropriately considered in decisions involving water resources of the state.
- 3. **Economic Development** Encourage and support economic development by the optimum use of the water resources, with due regard for prior water rights, that promotes the integration and coordination of the use of water, the augmentation of existing supplies, and the protection of designated waterways [Idaho Code 42-1734A(1)(b)].
- 4. **Environmental Quality** Maintain, and where possible enhance water quality and water-related habitats. Study and examine the quality of rivers, streams, lakes and ground water [Idaho Code 42-1734(15)], and assure that due consideration is given to the needs of fish, wildlife, and recreation in managing the water resources of the state.
- 5. **Public Safety** Encourage programs that will assure life and property within the state are not threatened by the management or use of our water resources.

Policies

State Water Plan policies are directed toward optimum use of the state's water resources. The policies provide a framework within which private enterprise and government entities can propose and develop water resource projects and water management scenarios. Specific water resource projects and programs are identified in the comprehensive plans developed for defined geographic areas. The Water Resource Board adopts the following policies for the conservation, development, management and optimum use of all the unappropriated water resources and waterways of this state in the public interest [Idaho Code 42-1734A].

1. Optimum Use

The overarching desire of the Board is to establish policies, initiatives, and programs that lead to optimum use of the vital water resources of the state. Water is essential to the vitality and prosperity of the state. All the waters of the state, when flowing in their natural channels, including the waters of all natural springs and lakes within the boundaries of the state are declared to be the property of the state (I.C. § 42-101). The state through the Idaho Department of Water Resources supervises the appropriation and allotment of the right to use the state waters for beneficial purposes.

1A - STATE SOVEREIGNTY

The state has sovereignty over decisions affecting the development and use of its water resources and opposes any attempt by the federal government, other states, or any other entity to usurp the state's role in these areas.

Discussion:

The Idaho Water Resource Board is responsible for the formulation of state water policy through the State Water Plan. The state's position on existing and proposed federal policies and actions should be coordinated by the Water Board to ensure the state retains its sovereign right to control the water resources of the state.

Implementation Strategies:

- Coordinate activities with federal agencies to address common programs
- Develop partnerships with sister agencies to ensure their needs are being met by state processes
- Take legal actions when necessary to protect sovereignty
- Monitor/revisit agreements to keep current and enforced on regular intervals/schedule
- Develop partnerships and agreements with neighboring states to work proactively on water right issues
- Coordinate with other state entities to ensure state sovereignty over all aspects of water rights -- common front

Milestones

- Establish partnerships with surrounding states addressing water issues
- Establish partnerships with appropriate federal agencies addressing water issues

Recommendations

• Proactively develop partnerships with federal agencies and states before crises occur.

1B - BENEFICIAL USE OF WATER

Beneficial uses should include certain nonconsumptive water uses.

Comment: This policy is affirmed by Idaho Code 42-1501 and is reflected in the policies adopted by the Idaho Water Resource Board that "beneficial use" includes, but is not limited to, water required for the protection of fish and wildlife habitat, aquatic life, recreation, aesthetics, navigation, water quality, and managed ground water recharge as well as the traditional uses for agriculture, manufacturing, mining, hydropower, and human consumption.

Implementation Strategies:

- Review existing state policies and evaluate potential incorporation of non-consumptive uses
- Establish or participate in local groups to formulate recommendations regarding nonconsumptive water use needs and priorities

Milestones

- Revise policies and rules as needed.
- Local committee recommendations

1C - TRANSFERABILITY OF USE

Changes in the nature of use of a water right should be allowed including changes to nonconsumptive uses provided other water rights are not injured.

Comment: The demand for water increases every year while the volume of unappropriated water within the state continually decreases and many basins are at or near full appropriation. The purpose of allowing transferability of water rights is to provide flexibility in water allocation to meet changing conditions. Idaho Code 42-108 and 42-222 provide for changes in place of diversion, place of use, period of use, and nature of use. Provision is made to protect other water users, the agricultural base of an area, and the local public interest. Priority dates are retained if other water right holders are not injured.

In some instances, it is in the public interest to allow changes from traditional uses to instream flow purposes. In highly developed areas, the potential to protect or restore fish and wildlife, water quality, aesthetic, or recreation resources may depend upon the transferability of water rights. To make such transfers substantive, the priority date of the original water right should be retained if other water rights are not injured..

Implementation Strategies

- Promote efficiency of transfer process through revision of IDWR policies and procedures as necessary.
- Review existing statutes and rules, propose revisions as necessary to expedite transfers
- Promote acquisition of additional resources, IDWR staff and funding to process transfers

Milestones

• Number of transfers processed

Recommendations

• Chapter 15, Title 42, Idaho Code needs to be expanded to enable the Idaho Water Resource Board to apply for a change in the nature of use when a water right is acquired that is best used for minimum or instream flow purposes

1D WATER SUPPLY BANK

The sale or lease of water is critical to the efficient management of the state's water resources. Use of the State's Water Supply Bank to meet consumptive and non-consumptive needs shall be encouraged.

Comment: As the state approaches the situation where little or no water is available for new appropriations, the Water Supply Bank, established by Idaho Code 42-1761, affords an efficient mechanism for the sale or lease of water both from natural flow and storage. By aggregating water available for lease, rental pools operating under the authority of the Water Supply Bank can supply the water needs of many potential users.

The Idaho Water Resource Board has adopted rules and regulations governing the sale or lease of water through the Water Supply Bank. The Idaho Water Resource Board has authorized local entities to operate rental pools in Water Districts 01, 37/37M, 63, 65, 65K and 74. The Shoshone-Bannock Tribes are also authorized pursuant to state law, to operate a rental pool.

The Water Supply Bank and rental pools should be available to meet both diversionary and instream flows. The Idaho Legislature authorized formation of a local rental pool to meet critical instream flow needs in the Lemhi River by leasing and renting natural flow water rights (Idaho Code 42-1765A and 42-1506). This process should be extended to other watersheds with similar conditions.

Local rental pools, established under the authority of the Water Supply Bank, can provide for consumptive and non-consumptive water needs, and have been established in the Lemhi and Big Wood drainages to address specific non-consumptive natural flow rental pools needs.

Implementation Strategies:

- Review existing statues and rules, propose revisions and implement changes to incorporate non-traditional banking goals
- Evaluate Water Supply Bank for improvements for streamlining procedures and expanded the use of the Water Supply Bank into new areas
- Integrate marketing mechanisms with administrative processes to encourage use of bank
- Promote legislation to provide Board with authority to establish natural flow rental pools as needed.
- Promote use of Water Supply Bank to meet temporary reallocation of water
- Implement natural flow and storage rental pools in additional basins where needed

Milestones:

- Increased use of Water Supply Bank
- New storage rental pools established

Recommendations:

- Statutory authority to establish local natural flow rental pools for basins as needed
- Develop public information and education program to promote water supply bank

1 E - CONJUNCTIVE ADMINISTRATION

Where evidence of hydrologic connection exists between ground and surface waters, they are to be managed and administered conjunctively.

Comment: The goal of conjunctive administration is to protect the holders of prior water rights while allowing for the optimum development and use of the state's water resources. Nearly all ground water aquifers in the state discharge to or are recharged by a surface body of water. Surface water seeps through streambeds, lake beds, channel banks, and irrigation delivery systems to aquifers. Irrigation practices, ground water pumping, and climate variability impact the available supply. Aquifers, in turn, serve as underground reservoirs, and can stabilize stream and spring discharge during dry periods. The approval of new water-use applications and the administration of existing water rights must recognize this relationship.

AQUIFER PLANNING AND MANAGEMENT EFFORT - Incorporate new program Implementation Strategies:

- Develop prioritized list of basins lacking sufficient technical information to assess ground and surface water interaction.
- Investigate new technical tools for assessing interaction to streamline the process

Milestones:

- Number of basins in which conjunctive management has been implemented
- Number of basins that have completed Aquifer Management Plans

1F - GROUND WATER WITHDRAWAL

Average withdrawals from an aquifer should not exceed the reasonably anticipated rate of future recharge to that aquifer.

Comment: Excessive withdrawals of ground water may cause economic, environmental, and social problems nearly anywhere in the state. The state should seek to correct withdrawal/recharge imbalances in an orderly fashion, while attempting to minimize negative impacts.

Idaho Code 42-226 allows full economic development of the state's underground water resources. The Director of the Department of Water Resources can establish reasonable ground water pumping levels when necessary to protect prior appropriations of ground water. It is important that all beneficial uses, including interdependent spring and surface water uses be considered in evaluating the full economic development potential of an aquifer. Section 42-237a provides that the Director may prohibit or limit the withdrawal of water from a well if withdrawal would result in diversion of the ground water supply at a rate beyond the reasonable anticipated rate of future natural recharge. The director may allow withdrawals to exceed natural recharge if a program exists to increase recharge or decrease withdrawals and senior groundwater rights are protected.

There are areas within the state where withdrawal/recharge imbalances of the ground water resource have been identified by the Department of Water Resources. Idaho Code 42-233a and 233b give the Director of the Department of Water Resources the authority to designate areas as either Ground Water Management Areas or Critical Ground Water Areas. Designation and its associated management options provide a logical step in arresting excessive withdrawals from an aquifer. The Department of Water Resources will require water-use reporting and the measuring of water levels.

Implementation Strategies:

- Assess conditions and trends of ground water levels in primary aquifers to determine water supply and demand balance on a regular basis
- Establish local advisory committees to assist in recommendations for ground water management
- Establish adequate monitoring networks to access resource conditions and trends
- Set criteria for determining average conditions based on local climate and aquifer characteristics
- Determine anticipated rate of future recharge for significant aquifers
- Evaluate water budget adjustment options

Milestones:

- Number of water budgets for primary aquifers and other aquifers on a priority basis
- Number of anticipated rate of future recharge determinations
- Number of advisory committees active in all ground water management and critical ground water areas
- Number of ground water management plans adopted for all administratively designated areas
- Number of basins with adequate monitoring networks for assessment

Recommendations:

- Investigate cooperation with state, federal and local agencies for ground water studies
- Determine safe yields for aquifers as part of the comprehensive aquifer planning and management effort

1 G - SPRING FLOWS

The hydrogeologic relationships between ground water supplies and spring flows should continue to be quantified to allow for the determination of optimal development of the water resources.

Comment: Spring flow is part of the natural discharge from an aquifer. Ground water withdrawals, drought, and reduced recharge can all affect spring flows. Where a hydrogeologic relationship exists, it must be sufficiently quantified to allow for optimal utilization of the ground water supply while protecting established senior rights which depend on spring flows discharging from the aquifer.

Implementation Strategies:

- Increase measurement and monitoring of springs
- Promote cooperative study efforts to better quantify spring hydraulics
- Establish funding for studies.

Milestones

Number of studies initiated to quantify ground water/surface water relationships

1H - INTERSTATE AQUIFERS

We should coonerate with neighboring states in managing

Comment: Where interstate aquifer issues are involved, the state policy is to work to develop and share technical tools, including models and data collection, so that the states can cooperatively manage ground water resources.

Any agreements established should maximize flexibility and adaptive approaches. Memoranda of Agreement or Memoranda of Understanding are preferable to more rigid interstate compacts.

Implementation Strategies:

- Cooperate with neighboring states on water studies and data gathering to assess ground water conditions and trends
- Implement process for regular coordination activities with neighboring states that share ground water resources

Milestones:

- Agreements approved by Idaho and neighboring states
- Regular coordination meetings held

Recommendations:

• Continue on-going coordination efforts and pursue new opportunities for collaboration

11 - WATER MEASUREMENT

The water resources of the state should be quantified and their uses should be measured.

Comment:

The measurement of water availability and use is necessary to assure we are meeting existing obligations of our water resources and for optimal water resource planning and management.

Idaho Code 42-1805 lists as a duty of the Director of the Department of Water Resources preparation of a present and continuing inventory of the water resources of this state. Maintaining viable stream gaging in the state is challenging given many gaging stations have been abandoned due to rising maintenance costs and reductions in agency funding. The Federal agency costs continue to escalate and the gaging cost they share continues to decrease. The existing stream gaging program should be reviewed and enhanced in the most efficient manner to meet water planning and management needs. Many ground water systems have not been adequately studied. Defensible assessment requires adequate current and historical ground and surface water measurements.

Water use quantification is essential for water resource planning. Chapters six and seven, Title 42, Idaho Code, list authorities for water measurement. The State, through the Department of Water Resources, needs to be actively involved in water use measurement and reporting.

Data gathering is a labor and cost intensive activity. Improved technological tools are available to improve the methods for monitoring water resource conditions and for distributing the data. Automated data collection through electronic data recording equipment and transfer of data through radio and satellite systems can be used to conserve manpower and financial resources, provide instantaneous access to data, offer transparency of data, and improve calibration of models and resource conditions. Automation also provides improved water distribution and administration by providing real-time information with which to adaptively manage and respond to changing conditions.

Implementation Strategies:

- Development and strategy for addressing data deficiencies
- Evaluate existing data collection network of ground and surface water to identify areas for conversion to electronic data collection systems
- Evaluate adequacy of existing measurement network and formulate assessment of adequacy

Milestones:

- Increased number of automated data collection devices
- Number of adequacy assessments completed
- Number of deficiency strategies implemented

Recommendations:

• Expand collaborative mechanisms with state, Federal and local agencies to develop and fund data collection efforts

1J - WATER QUALITY

Water should be protected against unreasonable contamination or deterioration in quality, thereby maintaining designated beneficial uses.

Comment: It is essential that the quality of Idaho's water resources be protected for public safety and economic stability and growth. The quality of surface and ground water depends in large degree on land-use practices within watersheds. Land managers and local units of government are urged to adequately consider means of reducing nutrient loading bacterial contamination and soil erosion and deposition to protect water quality. The Idaho Department of Environmental Quality (IDEQ) is the lead state agency for protecting water quality. They have a program of river basin water quality planning and management that is executed through local Watershed Advisory Groups (WAGs). Local units of government and special use districts should participate with these advisory groups in the preparation of water quality management plans.

The Department of Water Resources administers a statewide ambient ground water quality monitoring network and the Environmental Data Management System. Regional and local monitoring networks are managed by the Department of Environmental Quality. The citizens of Idaho will be most efficiently served by cooperative water quality monitoring programs involving appropriate public and private entities, and establishment of an information distribution system for all water quality data.

Implementation Strategies:

- Coordination and integration of monitoring programs with public and private organizations
- Conduct routine analysis of statewide water quality monitoring program to identify needed modifications
- Cooperate with water quality programs in other agencies to integrate water management programs and policies to enhance water quality protection

Recommendations

• Formulate strategy to collaborate with agencies that have water quality authorities and to establish enhanced linkage of water quality and quantity programs

1K-POLLUTION CONTROL

The use of water to dilute pollution is not a substitute for adequate treatment.

Comment: State and federal water quality programs should provide protection for the current high quality of water associated with streams within the state. In most cases, allocation of water for instream flow use should be directed toward meeting fish, wildlife, and recreational needs and not to the dilution of pollution. One way to ensure sufficient water is to obtain storage rights or construct new storage to provide for water quality maintenance flows in reservoirs and instream flow rights for stream reaches below impoundments.

Implementation Strategies:

- Baseline conditions of water quality and quantity should be determined
- Coordinate with other agencies to integrate quality and quantity water management programs

Recommendations

• Evaluate opportunity to integrate IDWR and IWRB water quantity effort with water quality programs in other agencies

1L - MANAGED RECHARGE

Managed recharge should be promoted and encouraged, pursuant to state law.

Comment: The Idaho Water Resource Board recognizes the benefits that managed recharge provides. Managed aquifer recharge may enhance spring flows, and provide mitigation for junior ground water depletions and help maintain desirable aquifer levels. Managed recharge may optimize existing water supplies by changing the timing and availability of water supplies to meet water demands. Managed recharge may also be a strategy for enhancing stream flows and as an adaptive mechanism for minimizing the impacts of climate change.

The IWRB should provide a substantive role in supporting and developing managed recharge projects in cooperation with local entities.

Managed recharge should be monitored to document the beneficial effects on the state's water resources, and to minimize any concerns or issues including protection of ground water quality.

Implementation Strategies:

- Develop consistent procedures for managed recharge projects
- Cooperate with public and private entities to evaluate managed recharge
- Review statutes, rules and policies for consistency and flexibility for managed recharge projects
- Coordinate managed recharge programs with other agencies for efficient oversight.
- Identify areas where managed recharge should be evaluated to address regional water supply and demand

1 M - LOCAL NATURAL FLOW RENTAL POOL

Authority granted in Idaho Code § 42-1765A for the Lemhi river basin should be expanded to other

The Idaho legislature established by statute authority to the Idaho Water Resource Board to appoint a local committee to facilitate operation of the water supply bank in the Lemhi river basin. The Lemhi water supply bank was unique in that it provides for a local committee to rent natural flow water rights between consenting owners and renters. It also provides for partial season leasing and establishes that the rented water could be used to satisfy a Board minimum stream flow water right.

Water users in many basins continue to struggle with issues related to federal implementation of the endangered species act (ESA). Expanding the Board's authority to establish local

committees for natural flow rentals would be a significant help in other ESA basins and enhance Idaho water management flexibility.

Implementation Strategies:

• Work with Natural Resource Interim Legislative Committee to evaluate the potential and formulate recommendation

1N - WATER SUPPLY ENHANCEMENT

New surface water storage will provide a significant source of water to meet existing and future water demands

Discussion:

Future economic development, population growth, and changing priorities will bring additional demands on Idaho's water resources. In future years, the construction of additional storage will play an important role in flood management, water supply enhancement, hydropower and recreation benefits. Storage opportunities are available through the construction of new reservoirs, enlargement of existing reservoirs, and at off-stream sites.

The benefits and costs associated with storage opportunities fluctuate with political, environmental, climatic, economic and other changes. Some projects have been sufficiently studied and should proceed to feasibility/design stages. Other sites require additional investigation to determine viability of the potential project. Potential projects should be categorized and level of further study identified, and when appropriate, pursue development.

While the State recognizes the rights of land owners, improvements and new development within potential storage sites, which would prevent viable water resource projects, should be discouraged. IWRB should prioritize and pursue protection of potential sites through agreements, purchase or other mechanisms when appropriate.

Implementation Strategies:

- Maintain and evaluate potential reservoir sites and establish level of study needed. Sites should be categorized to identify future actions (eliminate from list, further study level needed, proceed with project, etc.)
- Initiate feasibility/construction design studies for sites determined to be high priority. Project partners should be identified or project pursued independently.
- Initiate assessment level studies for sites determined to need additional investigation. Coordinate/partner with federal agencies or other interested parties.
- Revise list as needed when new potential sites are identified or if a site should be removed from the list.

Milestones:

- Annual review of potential storage site list and revised as appropriate.
- By 2010, feasibility studies of Teton, Galloway, Minidoka, and Twin Springs projects begun.
- New storage of 600 KAF under construction by 2025

Recommendations:

- Develop criteria for listing of potential sites to provide consistent monitoring of the list and keeping it current
- Develop targets for new storage development (by basin, needs, ?)

10 - WEATHER MODIFICATION

Enhancement of water supplies by weather modification should be encouraged as a cost-effective mechanism to help meet water needs.

Comments:

Weather modification, or cloud seeding, has been practiced in Idaho and across the western states for many years. According to studies in the state of Utah, weather modification increased the annual runoff in studied basins by as much as 13 percent, which was approximately 250,000 acre-feet. A cloud-seeding project in the Boise River drainage between 1993 and 1996 was calculated to increase runoff by 9.4%, resulting in an average annual streamflow increase of approximately 90,000 acre-feet at a cost of \$0.44 per acre-foot. In 2008, the IWRB completed a cloud-seeding feasibility study in the Upper Snake River Basin. The study estimated an increase in volume of approximately 149 KAF at a cost of \$674,000 annually (about \$4.50/AF).

Weather modification can be an economically feasible method to increase streamflow in areas that are conducive to the practice. Weather modification may enhance water supplies. Used in concert with water storage facilities, weather modification may help meet water needs.

Implementation Strategies:

- Support the continuation of current projects as well as the development of new projects independently or in partnership
- Collect base data and perform research on the effectiveness of weather modification technology.
- Investigate potential project sites

Milestones:

- Number of existing and new weather modification projects
- Estimated increase in annual runoff
- Funds spent to support weather modification projects

Recommendations:

• Investigate legal ramifications of water issues resulting from weather modification

2. Conservation

The Conservation policies focus on careful planning and wise use of Idaho's water. The purpose of the policies is to encourage water conservation practices and manage the use of water resources for the benefit of all Idaho citizens consistent with the Prior Appropriation Doctrine. Conservation programs should be voluntary and market based.

2A - WATER USE EFFICIENCY

The efficient use of water should be promoted in accordance with state water law.

Comment: As water use efficiencies are increased, reduced requirements in one water use sector could provide available water for existing uses, new demands, or help efforts to improve stream flows. State and local planning should consider water efficiency techniques, together with legislation or ordinances, that may help conserve water resources for drought periods and water supplies for other needed uses. Conservation may provide opportunities to improve water availability and offset the need for new water projects.

Implementation Strategies:

- Review existing laws and regulations and identify inconsistencies or constraints to implementing water efficiency
- Develop partnerships with local, state, and federal governments and non-governmental bodies to coordinate and support water conservation programs
- Establish a public information program
- Evaluate conservation opportunities simultaneously with evaluation of new water supplies
- Identify localized opportunities for water conservation

Milestones

- Number of Conservation Guidelines implemented
- Number of partnerships developed to coordinate water conservation
- Number of water conservation educational materials developed and distributed
- Quantify water saved through IWRB programs

Recommendations

- Seek resources to establish and implement a statewide water conservation program
- Make information available about water conservation practices appropriate for Idaho

2B - FEDERALLY LISTED SPECIES AND STATE SPECIES OF CONCERN

The public interest in water resources should be considered when decisions are made to maintain sustainable populations of plant and animal species whose existence is threatened by mankind's actions.

Comment: The state and federal government have identified species of concern and species that are listed or are candidates for listing as federally Threatened or Endangered. In most cases, action at the state level can identify management strategies that will insure sustainable populations of these species. The State will consider the public interest in determining its strategies and will encourage local leadership to this end. Nothing in this policy will hamper the efforts to eliminate noxious weeds or other pests.

Actions taken by federal agencies under authorities created by the Endangered Species Act do not modify state law. Efforts by the citizens and agencies of the state to achieve federal goals may be constrained by existing state law, particularly the protection and preservation of state water rights and property rights.

The State should take an active role in the listing process. To the extent allowed by federal law, the State should be involved in developing and administering recovery and habitat management plans for species that are listed.

The Idaho Department of Water Resources and the Water Resource Board will take appropriate steps to ensure that flows necessary to maintain sustainable populations of listed aquatic species remain in stream, while ensuring that the rights of the citizens of Idaho are protected. The Board's Water Supply Bank, Water Transactions, and Minimum Stream Flow programs are examples of tools to incorporate public interest and biological needs.

The Nez Perce Settlement Agreement between the state of Idaho, Nez Perce Tribe, and United States is an example of a strategy to protect endangered species through cooperation and communication. A key component of the Agreement is the protection of flows for selected streams important to the Tribe. The Idaho Water Resource Board holds minimum stream flow rights for 205 reaches as established under the Agreement. These minimum stream flow water rights provide significant protection for steelhead, salmon, and bull trout.

Since 2003, the IWRB has been improving tributary stream flow in the Upper Salmon River Basin through the Board's Water Transactions Program. State, federal, tribal, and non-profit agencies work together through the Upper Salmon Basin Watershed Program Technical Team to identify stream reaches with flow limitations that are affecting ESA-listed species. Board staff then works cooperatively with willing water users to develop transactions that will leave water in stream.

Implementation Strategies:

- Coordinate activities with federal agencies to address common issues and concerns
- Coordinate with Idaho Office of Species Conservation to integrate water resource programs and stream protection with species recovery
- Coordinate with OSC on Comprehensive State Water Plan and its recommendations for minimum stream flows and State-designated protected rivers
- Cooperate, insofar as allowed by state law, in efforts to conserve and restore plant and animal species listed by the federal government as Threatened or Endangered
- Develop partnerships with agencies responsible for species protection and recovery
- Monitor existing agreements for compliance with State Water Plan policies

- Coordinate with other state entities to ensure state sovereignty over all aspects of water rights -- common front
- Explore non-traditional and innovative strategies to address species protection while incorporating public interest
- Promote programs which proactively solve problems through voluntary strategies such as water transactions programs which seek partnerships with willing water users

Milestones

- Establish partnerships with state and federal agencies responsible for species protection
- Establish partnerships with appropriate federal agencies addressing water issues

Recommendations

- Proactively develop partnerships with federal agencies and states
- Develop strategy for responding to conflicts



2C - LAKE AND RESERVOIR MANAGEMENT (pending revision)

Comprehensive management plans for surface use and water quality protection should be developed for lakes and reservoirs in the state.

Comment: Idaho is a land of numerous lakes and reservoirs. Many lakes and reservoirs in the state have experienced declining water quality, surface crowding, losses in scenic values, and physical damage to the shoreline. Comprehensive management plans for surface use, relative to public safety, and water quality protection can address these problems.

Each lake or reservoir has its own set of needs and constraints which must be considered. County and city government, the local public, land managers, and user groups of the lake or reservoir and its watershed, must be involved in plan development and implementation.. The Idaho Water Resource Board supports implementation of the Clean Lakes Act passed by the Idaho Legislature in 1989 [Chapter 64, Title 39, Idaho Code]. The law provides for the creation of regional councils empowered to develop lake management plans. It further provides for technical advisory groups to support the council in its planning efforts. These measures have been successfully used at Payette Lake to improve water quality. Add language about Priest/Pend Oreille Commission

Implementation Strategies:

- Support regional councils through participation and encouragement
- Supply technical data as requested to assist in developing lake management plans Check how minimum lake level water rights fit into statute

Milestones:

• Number of minimum lake levels established

2D - INSTREAM FLOW

When it is in the public interest, the Idaho Water Resource Board should seek to appropriate waters in the state for instream flow purposes.

Comment: Instream flows protect many nonconsumptive uses such as fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation, navigation, hydropower and water quality. Many of these uses have direct effects on the economy while others represent intangible values and the public interest. Chapter 15, Title 42, Idaho Code, provides the authority and spells

out procedures for the Idaho Water Resource Board to appropriate water for minimum stream flows.

The Idaho Water Resource Board supports efforts to obtain storage and natural flow rights to improve and maintain instream flows when in the public interest. By law [Idaho Code 42-108 and 42-222], provision is made to protect other water users and the agricultural base of an area.

The State Water Supply Bank and local rental pools are tools which can be used to improve stream flows through voluntary cooperation and to meet local needs. The Lemhi River Natural Flow rental pool and the Big Wood River Water Supply Bank are examples of locally managed programs which are used to supply stream flow during critical times while working to meet local traditions and concerns.

Implementation Strategies:

- Establish local rental pools to meet instream flow needs as requested
- Identify and apply for minimum stream flow water rights as necessary
- Coordination with other agencies to identify potential minimum stream flow needs

Milestones:

- Finalization of minimum stream flow water rights
- •

Recommendations:

- Statutory authority to establish local natural flow rental pools for basins as needed
- Chapter 15, Title 42, Idaho Code, should be expanded to enable the Idaho Water Resource Board to transfer acquired water rights to minimum stream flow water rights

2E- STATE PROTECTED RIVER SYSTEM (pending comment from IDFG)

A system of state protected rivers exists to provide protection of unique features of rivers and related lands for recreational, scenic, and natural values.

Comment: Idahoans have expressed a desire to retain some rivers or river reaches in a free-flowing condition. Idaho Code 42-1734A(1) authorizes the Idaho Water Resource Board to protect highly-valued waterways as State protected rivers. The authority to designate "protected rivers" derives from the State's power to regulate the beds of navigable streams and the waters within the state.

The Idaho Water Resource Board encourages the federal government to work within the state water planning process rather than independently pursuing federal protection of waters within Idaho. State water planning provides a means for ensuring coordinated water planning by both federal and state governments.

Implementation Strategies:

• coordinate with local governments and federal agencies (MOUs)

• develop priority list for comprehensive basin planning

Milestones:

- Number of Protected River designations
- Number of Wild and Scenic River designations negotiated
- Number of MOU/MOAs implemented

2F- RIPARIAN HABITAT AND WETLANDS(pending comment from IDFG)

Protecting the ecological viability of riparian habitat and wetlands within the state is a critical component of watershed planning.

Comment: The practice of good stewardship for managing public and private riparian zones and wetlands is necessary to protect their ecological values. Riparian and wetland protection above the mean high water elevation should be implemented at the watershed level. The authority to control land use is set out in the Local Planning

Act of 1975, as amended. The Idaho Stream Channel Protection Act [Idaho Code 42-3801 thru 3812] regulates alteration of stream bed below the mean high water elevation.

Implementation Strategies

• coordination with local & federal (agencies specific

Milestones:

Recommendations:

2G- STREAM CHANNEL REHABILITATION (pending comment from IDFG)

The costs and benefits of stream channel rehabilitation will be evaluated where past activities currently or potentially affect the quantity from or quality of the state's watersheds.

Comment: Catastrophic flooding is often the outcome of heavy run-off combined with human disturbances, and may result in the destruction of stream channels. The functional loss of impacted stream channels may threaten public safety, private property, and the overall quality and quantity of water produced in the affected watershed. It is appropriate for the State to take action to rehabilitate impacted stream channels where public safety may be threatened, or where the remedial costs are less than the potential damages.

2H - RADIOACTIVE WASTE MONITORING

(Revised w/IDEO comments; pending IDEO review 11/4/2008)

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2I - SAFETY MEASURES PROGRAM

Owners of water distribution and storage facilities are encouraged to establish or continue safety initiatives which may include construction and maintenance of safety structures and public awareness programs to educate residents about hazards associated with these facilities.

Comment: Each year, numerous fatal accidents occur in the water distribution and storage facilities in Idaho. Accidents are not confined to one area of the state nor to one segment of the economy but are scattered throughout the state. Many cities in Idaho contain canals and irrigation distribution structures located near residential areas. Fencing, signing, debris removal, covering and other structures should be installed to provide for human safety as appropriate.

IMPLEMENTATION STRATEGIES:

- Support funding requests for assistance through the IWRB funding programs to construct and maintain safety features
- Encourage public awareness programs

MILESTONES:

• Decreasing trends in accidents associated with water distribution and storage facilities

2J - FLOOD HAZARD AREAS

Protection of floodplains through sound floodplain management and pre-disaster mitigation is vital in reducing or preventing flood damages.

Comment: Floods are the most frequent and costly disasters in Idaho. Floods can occur in any area of the state.— Local government-should plan for flood hazards and manage development to protect floodplain natural functions and to prevent increasing flood risk on other property.

Prospective property buyers should be made aware of identified flood hazards. The pressures to develop areas subject to periodic flooding will continue to increase as population increases.

In order to provide maximum opportunity for citizens of Idaho to obtain better and more reliable flood insurance, the National Flood Insurance Program should be adopted statewide. This program requires that local governments adopt minimum regulations and building standards in order to be eligible for national flood insurance and certain types of federal loans, grants and disaster assistance—Flood Insurance Rate Maps (FIRMs) prepared by the Federal Emergency Management Agency are available through the Idaho Department of Water Resources.

Implementation. Strategies:

- IDWR should coordinate with Army Corps of Engineers, FEMA and the Idaho Bureau of Homeland Security to get an overview of flood prone areas across the state.
- Assist agencies to secure funding to update and complete FIRMs for the entire state.
- Support distribution of information about flood plain management through meeting with real estate organizations and other groups

Recommendations:

- Amend Idaho statutes pertaining to property disclosure information to include whether subject property is located in a mapped flood hazard zone (Title 55 Property in General Chapter 25 Property Condition Disclosure Act)
- Amend I.C. 46-1020 through 1025 to make the National Flood Insurance Program mandatory in Idaho cities and counties

2K- FLOOD CONTROL LEVEE REGULATION

Pending comment from Flood Control Districts (11/20/08, hh)

It is the policy of Idaho that the construction and maintenance of flood control levees be regulated by the State.

Comment: The only standards applicable to the construction of flood control levees in Idaho are in the Rules governing Stream Channel Alterations. These standards apply only when all or part of the levee will be located below the mean high water mark.

Flood control levees are maintained by local entities. There are no maintenance regulations so the degree of maintenance varies with the capability and diligence of the responsible organization. This situation creates a potential hazard in that levees may be deteriorate to the point of being unsafe.

All new flood control levees should be required to be built to standards promulgated by the Department of Water Resources. The Department should also be authorized to develop maintenance criteria for flood control levees and to insure compliance with these criteria through an inspection program.

When a levee is scheduled to be rebuilt, a cost/benefit analysis should be conducted to determine if it is prudent to rebuild the levee in question or buy the property which the levee would protect.

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Milestones:

Recommendations:

DEVELOPMENT GROUP deleted (11/20/08, hh)

4. Management

A goal of the State Water Plan is to improve efficiency and secure greater productivity from existing water supplies. Management policies are concerned with improvement in practices, procedures, and laws relating to water management.

The focus of the Management policies is on improvement in the practices, procedures, and laws relating to existing water and energy resource administration and programs. The purpose of the policies is achievement of greater administrative efficiency.

3A - REVIEW OF FEDERAL RESERVOIR WATER ALLOCATION

Agreements will be maintained or established with federal agencies to allow Idaho Water Resource Board review of any proposed water allocation from federal reservoirs.

Comment: This policy does not encroach upon the authority of federal agencies to operate their facilities according to congressional authorization, but would help to ensure that their actions occur with state re-view and concurrence. The Idaho Water Resource Board would be guided in such a review by the conformance of the proposed allocation with the State Water Plan.

Formal agreements are necessary for the State Water Plan to be implemented in a coordinated manner. The Idaho Water Resource Board and the U.S. Bureau of Reclamation reached an agreement in 1988 providing for Board review of proposed reallocations

IMPLEMENTATION STRATEGIES

- Review status of existing agreements and need for additional agreement
- Develop new agreements with federal agencies for implementation of State Water Plan, if determined to be necessary
- Establish procedures for ensuring coordination with federal agencies for IWRB review of proposed water allocations from federal reservoir
- Explore agreements with Army Corps of Engineers for Albeni Falls and Dworshak operations.

MILESTONES

- Procedures in place for review
- Signed agreements, when necessary

3B - HYDROPOWER LICENSING

Future water and energy needs, existing water rights, related settlement agreements and the State Water Plan will be considered in hydropower licensing.

Comment: Hydropower water rights may be limited to a specific term and subordinated to upstream depletionary uses [Idaho Code, 42-203B(6) and (7)]. Water rights for power purposes may also be defined by agreement as unsubordinated to an established minimum flow [Idaho Code, 42-203B(2)]. Idaho asserts its sovereign right to regulate the state's water resources. The federal government and private power producers, in the hydropower licensing process, must recognize water rights and other constraints on water use established through state law. Hydropower licenses should be compatible with the State Water Plan and outstanding power purchase contracts.

IMPLEMENTATION STRATEGIES

- Coordinate water right review during FERC relicensing process
- Coordinate with Idaho Office of the Attorney General during FERC relicensing process
- IWRB should participate in FERC licensing process to achieve input.

MILESTONES

- New FERC licenses comply with State Water Plan
- New FERC licenses contain language protecting Idaho sovereignty and subordinate hydropower to other water uses, as determined on a case-by-case basis.

3C - HYDROPOWER SITING

New hydropower developments are encouraged when in conformance with the State Water Plan.

Comment: The Idaho Water Resource Board is charged with the responsibility for planning for the optimum development of the water resources of the state through policies and water allocations which reflect the local public interest. Specific hydropower siting issues are addressed in the Idaho Water Resource Board's comprehensive basin or river plans. The Federal Energy Regulatory Commission must consider State comprehensive plans in making hydropower siting decisions.

The IWRB recognizes that new storage projects will be necessary to meet future water demands and encourages the development of hydropower facilities to be considered with new storage projects. Hydropower provides a clean, efficient, and renewable energy source. The Board encourages new hydropower resources be developed at dams having hydropower potential which do not currently generate power or do not generate at their maximum potential to meet the future energy needs. New structures or projects should be carefully evaluated to insure that the benefits to the state outweigh any negative consequences associated with the proposed development. The Idaho Water Resource Board will evaluate specific hydropower developments in comprehensive plans for river basins or waterways.

As a general policy, the Idaho Water Resource Board believes that energy conservation and efficiency improvements should receive primary consideration to meet increasing energy needs.

The State of Idaho will be best served through conservation and the upgrading of existing energy systems. These measures are attractive because of their low costs, short lead time, and flexibility.

IMPLEMENTATION STRATEGIES

- Develop coordination process for facilitating oversight of hydropower siting proposals from private and public entities
- Evaluate hydropower potential during storage project studies

MILESTONES

• All new hydropower proposals comply with the State Water Plan



3D – WATER IMPROVEMENT DISTRICTS

Pending draft language (11/20/08 hh)

3E - RESEARCH PROGRAM

Encourage and conduct research on important water resource topics.

Comment: Basic research and analysis is crucial for planning and management of water resources in Idaho. Data collection and research is conducted by numerous public and private entities. Cooperating and sharing of information among groups can lead to more efficient use of limited financial resources and for more effective projects to meet the needs of Idaho. While water programs in Idaho can incorporate information from research in other states, more research dealing with specific problems in Idaho is needed. Topics that need immediate attention include:

- water use efficiency,
- optimum monitoring programs for water use,
- ground and surface water relationships specifically with regard to the timing and spatial distribution of pumping and recharge efforts,
- ground water flow models, and
- cooperatively developed system operation modeling techniques for Idaho river basins.

IMPLEMENTATION STRATEGIES:

- Facilitate coordination, dissemination, and sharing of research results and communication with other agencies
- Develop list of research topics and propose to researchers

MILESTONES

- Establishment and participation in coordination groups
- Completed research projects application to planning and management

RECOMMENDATIONS

• Identify dedicated funding sources for basic and applied research

3F - FUNDING PROGRAM Pending language revision

State, Federal and other funds should be sought to support the development, preservation, conservation, and restoration of the water and related resources of the state.

Comment: The Idaho Water Resource Board's Revolving Development Fund and the Water Management Account are mechanisms for achieving the goals of this policy. The funds or accounts are supported by the appropriation of moneys from the state's general fund, federal funds, and other revenue sources. These programs have provided financial assistance for water development, conservation, system rehabilitation and water treatment projects.

Idaho Code 42-1734(2) provides that the Idaho Water Resource Board may lend the proceeds of the sale of revenue bonds to a local water project sponsor or sponsors. The issuance of revenue bonds does not constitute a general obligation of the State of Idaho or the Idaho Water Resource Board.

Comment regarding origin of implementation strategy (the CAMP language), incorporate language about CAMP funding.

Implementation Strategies: use CAMP language: 2.4.1 ... Establishment of water management fund

3G - PLANNING PROGRAM

Comprehensive water planning should be implemented based upon water needs and/or local support within a geographic area.

Comment: Comprehensive planning is necessary to promote the effective and efficient use of Idaho's water, to ensure protection of all beneficial uses of water, to enhance conservation, and to minimize conflicts between competing water uses. Comprehensive planning projects through existing authorities should be prepared to evaluate the specific interrelationship between ground and surface water and to provide for the orderly protection and development of the state's water resources.

Comprehensive basin plans contain State protected river designations and recommendations concerning other aspects of water use and values. The positions and policies contained in an approved plan are the State's official position on water use in the affected areas. The plans also assure that the state's interests will be considered in federal management agency decisions. Comprehensive aquifer planning provides a defined process to identify and plan for meeting future water demands and identify potential conflicts.

The increasing value and need for water resources has been recognized by many agencies and private groups. The Idaho Water Resource Board can facilitate coordinated planning for the water resources of Idaho through informal and formal processes. A memorandum of understanding was signed in 1991 between the state and federal agencies to coordinate river basin planning and designating protected rivers. (Reference SRBA MOU for Wild & Scenic Rivers)

Planning and management of water resources impacts all levels of government and the public. Public involvement which reflects local public interest should be incorporated into water resource planning.

IMPLEMENTATION STRATEGIES

- IWRB staff will coordinate with MOU signators to ensure agreements are current and active
- Establish relationship of basins to local public interest.
- Develop new MOUs as needed for cooperative planning and management

MILESTONES

• Components of MOUs are implemented

3H - WATER RIGHTS ADJUDICATION (Pending additional information)

Adjudication of water rights through the state courts should be completed to fully define and quantify all state, tribal and federal water rights.

Comment: The adjudication of water rights is often necessary to sort out overlapping or incomplete claims for the use of surface and ground water resources. These conflicts need to be resolved if the resources are to be managed effectively. Effective programs can then be applied to assure that water is diverted and used in accordance with valid rights.

Federal agency and tribal water rights claims in Idaho must be identified and quantified to plan for continued use of existing water rights and future needs. As a part of each effort to identify and quantify federal agency and tribal water rights, the protection of existing water rights must be considered. The State should seek to negotiate these rights whenever appropriate.

The Idaho Water Resource Board is lead agency to coordinate state activities related to the negotiation of reserved water rights with Idaho Tribes. The successful negotiations concluded with the Shoshone-Bannock over the Fort Hall water rights and the Nez Perce Snake River Agreement serve as examples of negotiated settlements.

3I - CLIMATE VARIABILITY

Climate Change resilience and preparedness goals should be guiding principles for Idaho Water Resource management.

Discussion:

Average temperatures in the western United States have risen 2-5 degrees during the 20th century and are predicted to continue rising into the future. While recognizing the uncertainties inherent in climate prediction considerable efforts need to be focused on identification of climate related risks and building resiliency to climate extremes.

Climate experts are less confident on how continued warming will affect the overall amount of precipitation Idaho receives but they have already documented changes in runoff timing and increased annual variability. More rain and less snow, earlier runoff, reduced summer and fall stream flows, increased water temperatures, and more severe droughts and floods are predicted. High priority should be given to identifying and implementing actions designed to deal with water system stresses brought about by climate. Increasing public and agency awareness, enhanced technical capacity, improved information exchange, expanding and maintaining adaptive mechanisms and strengthening community partnerships that reduce vulnerability are proactive steps to preparedness.

Implementation Strategies:

- Policy makers at all levels should evaluate existing rules and regulation that limit adaptive flexibility.
- Reservoir operation rule curves should be cooperatively analyzed and additional weight should be given to more recent hydrologic data.
- Expansion and diversification of water supplies, including increased surface and ground water storage should be aggressively pursued.
- Risk assessments particularly regarding flood vulnerability and environmental impact mitigation should be developed and frequently updated.
- Adaptive mechanisms for agriculture, municipal water suppliers, water resource management agencies and hydropower interests should be identified and implemented as soon as possible.
- Preparedness actions should include long, medium and short-term objectives. Actions must be coordinated and effort must be focused and collaborative approaches.

Milestones:

- Completion and implementation of updated flood control rule curves.
- Construction of water supply projects.
- Finalization of Risk assessment studies.
- Documentation of preparedness actions and establishment of collaborative forums.

Recommendations:

- Establish funding for Climate Change preparedness and risk assessment for all levels of government.
- Create Climate Change collaboration forums.
- Aggressively move forward with study, design and construction of water projects.

5. Snake River Basin

5A - SWAN FALLS AGREEMENT

The Swan Falls agreement between the state and Idaho Power Company establishes the framework for water management in the Snake River basin.

Comment: The Swan Falls Agreement was signed in 1985 by the State of Idaho and the Idaho Power Company. The Idaho Water Resource Board is committed to continued implementation of this agreement. Minimum flows in the Snake River are crucial to the Swan Falls Agreement. During portions of low water years, river flows downstream from Milner Dam to Swan Falls Dam consist almost entirely of ground water discharge. The Eastern Snake Plain aquifer which provides this water must therefore be managed conjunctively as an integral part of the river system. This agreement also calls for the adjudication of water rights in the Snake River Basin to enhance the state's water management capabilities

5B - SNAKE RIVER MINIMUM FLOWS

Average daily flows at the Murphy gaging station shall meet or exceed 3,900 cfs from April 1 to October 31 and 5,600 cfs from November 1 to March 31. The average daily flow measured at the Weiser gage shall not be less than 4,750 cfs. (A minimum average daily flow of 5,000 cfs at Johnson's Bar shall be maintained and an average daily flow of 13,000 cfs shall be maintained at Lime Point

(river mile 172) a minimum of 95 percent of the time. Review pending DAG discussion) The exercise of water rights above Milner Dam has and may reduce flow at the dam to zero.

Comment: In licensing the Milner hydropower project, the Federal Energy Regulatory Commission (FERC) specified "target flows" for the Snake River at Milner. The target flow must be satisfied only when water in excess of prior irrigation rights is available. Water for target flows may be acquired from storage or may be leased from the Upper Snake Rental Pool. The State should seek to acquire water whenever it becomes available in order to mitigate the impacts of low flow below the Dam.

The minimum flows established for the Snake River at the Murphy and Weiser gaging stations are management and permitting constraints; they further insure that the State will be able to assure an adequate hydropower resource base and better protect other values recognized by the State such as fish propagation, recreation, and aesthetic interests, all of which would be adversely impacted by an inadequate stream flow.

(The minimum flows established for Johnson's Bar and Lime Point are contained in the original Federal Power Commission (now FERC) license for the Hells Canyon hydropower complex. By adopting these flows, the Idaho Water Resource Board recognizes the importance of minimum flows to downstream uses and makes their maintenance a matter of state water policy. Lower flows may be permitted at Lime Point during the months of July, August, and September, during which time the operation of the Hells Canyon dams shall be in the best interest of power and navigation as determined by the Corps of Engineers and Idaho Power Company as owner of the Hells Canyon power facilities. The Board encourages Idaho Power to cooperate with the Bureau of Reclamation and Bonneville Power Administration to provide shaping of water released for flow augmentation purposes. Although Board policy on flow augmentation is that it should only occur if credible scientific information shows a measurable increase in anadromous fish survival, if water is rented for flow augmentation, shaping the releases provides significant flexibility related to timing of those releases. As per discussion by Mr. Tucker (2/5/08), Idaho Power Company concern is need for customers to be kept whole, have no problem cooperating to shape water releases. PENDING DAG DISCUSSION)

The Idaho Water Resource Board recognizes that FERC license requirements relate primarily to the provision of water for navigation and power and not to other instream uses. The Board realizes that the state has no authority to require releases of stored water by the power company, but believes the license conditions serve the public interest. When the Hells Canyon hydropower complex is relicensed, the Water Board will reevaluate the public interest.

Snake River flows above the hydropower right at any Idaho Power facility are considered unappropriated and therefore are not held in trust by the state. This distinction is further addressed in Policy 5C.

5C - SNAKE RIVER TRUST WATER (Consider eliminating policy and moving discussion to the Swan Falls Agreement section-staff will work on)

Water held in trust by the state pursuant to Idaho Code 42-203B be reallocated to new uses in accordance with the criteria established by Idaho Code 42-203A and 42-203C.

Comment: The agreement between the State of Idaho and Idaho Power Company dated October 25, 1984 provides that Idaho Power's claimed water right of 8,400 cubic feet per second (cfs) at the Swan Falls Dam may be reduced to either 3,900 cfs or 5,600 cfs during set periods of the year. The claimed water right of 8,400 cfs is deemed appropriated and the amount above the minimum flow established in Policy 5B up to the 8,400 cfs is held in trust by the state. The trust water area is defined by Rule 30 in the Idaho Department of Water Resources' Rules for Water Appropriation.

The agreement further provides that Idaho Power's claimed water rights at facilities upstream from Swan Falls shall be considered satisfied when the company receives the minimum flow specified in Policy 5B at the Murphy gaging station. The 8,400 cfs claim of the power company has not historically been available during summer months.

The 8,400 cfs claimed right at Swan Falls is reduced by the agreement to that flow available after satisfying all applications or claims that demonstrate water was beneficially used prior to Oct. 1, 1984, even if such uses would violate the minimum flows established in Policy 5B. Any remaining water above these minimum flows may be reallocated to new uses by the state providing such use satisfies existing Idaho law. This includes both storage and

natural flows that are delivered for managed recharge purposes. The declining spring flows at Thousand Springs has resulted in serious water administration and management issues on the Eastern Snake River Plain. Managed recharge is a major component in the effort to stabilize and possibly restore spring flows. This will increase Snake River base flows which will benefit power production.

However, due to continued spring flow decline in the Thousand Springs area since the late 1950s, water availability to satisfy additional beneficial uses is limited. A moratorium, as defined in Idaho Code 42-1806, on further water development has been in place since May 15, 1992.

5D - SNAKE RIVER BASIN DCMI

It is the policy of Idaho that 150 cfs of the water held in trust by the state above Swan Falls Dam pursuant to Policy 5C be reallocated to meet future domestic, commercial, municipal, and industrial consumptive uses in accordance with state law.

Comment: While most DCMI (Domestic, Commercial, Municipal, and Industrial) water uses are negligibly consumptive, future growth in Idaho's population and commercial and industrial expansion will require an assured supply of water.

A continuous flow of 150 cfs provides approximately 108,600 acre-feet of water per year. This volume of water is assigned to consumptive uses within the basin for domestic, commercial, municipal, and other industrial purposes. Industrial purposes include processing, manufacturing, research and development, and cooling.

During the ten-year period from 1985 to 1995, about 120 cfs was developed for DCMI uses within the trust water area. Adequate records should be kept and reviewed so that this allocation can be modified as necessary. Increases in the DCMI allocation, if necessary, will reduce the amount of water available for agricultural uses. The allocation will be reviewed as part of every Water Plan update.

5E - SNAKE RIVER BASIN AGRICULTURE

It is the policy of Idaho that appropriated water held in trust by the state pursuant to Policy 5C, less the amount of water necessary to provide for present and future DCMI uses as set forth in Policy 5D, shall be available for reallocation to meet new and supplemental irrigation requirements which conform to Idaho Code 42-203A, 203B, 203C, and 203D.

Comment: During the ten-year period from 1985 to 1995, about 45,600 acres of new irrigation development occurred within the trust water area. Data are not available to estimate the number of acres that received supplemental water during this period.

Idaho Code Section 42-203C limits the rate of new development in the basin above the Murphy gaging station to 80,000 acres in any four-year period. Impact on existing water rights, mitigation for the impact of diversions on hydropower generation, and criteria placed on the reallocation of hydropower rights, however, limits the rate of new development.

Check with Hal on the basis for deletion (hh 2/5/08)

5F - SNAKE RIVER NAVIGATION (hold pending DAG discussion on Lime Pt/Johnson Bar)

It is the policy of Idaho that water sufficient for commercial and recreational navigation is provided by the minimum flows established for the Snake River.

Comment: Commercial navigation en route to Lewiston via the Columbia River and Lower Snake River can be accommodated with the flows leaving Idaho in the Snake River at Lewiston. Above Lewiston, commercial and

recreational navigation on the river should be accommodated within the protected flows on the Snake River and tributary streams.

5G - SNAKE RIVER BASIN SPRINGS (Pending DAG, staff make suggestions)

Maintaining spring flows in the American Falls and Thousand Springs reaches of the Snake River will sustain beneficial uses of surface and ground water supplies in accordance with state law.

Comment: Spring discharge in the American Falls and Thousand Springs reaches of the Snake River are vital to the Snake River Basin and Idaho economy. The springs near American Falls provide an important part of Snake River flow appropriated by Magic Valley irrigators. In the Thousand Springs reach, spring flow is the only practical source of water for many of the state's aquaculture facilities. It must be recognized that future management and climate conditions may reduce present spring flows and while existing water rights are protected, it may be necessary to construct different diversion facilities than presently exist.

During portions of low-water years, river flows downstream from Milner Dam to the Murphy gaging station consist almost entirely of ground-water discharge from the Thousand Springs reach. Maintaining these discharges should be the goal of water managers. Managed recharge of the aquifers and continued efforts to efficiently use ground water are two strategies for maintaining spring discharges in these reaches.

5H - SNAKE RIVER BASIN NEW STORAGE (Delete policy, but include comment in Swan Falls Section)

Applications for large surface storage projects upstream from the Murphy gage be approved subject to the requirement that the use is in the public interest.

Comment: "Large surface storage projects" are those which have the potential for significantly impacting existing uses. Projects for which approval is required under Section 42-1737, Idaho Code, would be such projects. This policy addresses the approval of new surface storage in the basin, but does not apply to already approved projects. Approval of new storage projects that would divert water from the main stem of the Snake River between Milner and the Murphy gaging station during the period November 1 to March 31 should be coupled with provisions that mitigate the impact such depletions would have on the generation of hydropower.

5I - WATER ACQUISITION (Move to Management Section-4A?)

As opportunities arise, the Idaho Water Resource Board shall continue to acquire water to provide management flexibility to meet existing and future water needs.

Comment:

As demands for water escalate, the value of water will increase to a point that will be difficult for some sectors to compete and as energy costs increase, many agricultural users especially those with high lifts will struggle to stay profitable. As opportunities to purchase water become available, the Idaho Water Resource Board should seek new or use existing funds to acquire water.

Include natural flow, storage, lease arrangements, gw, spring water, Short term, long term, permanent

6. Bear River Basin

6A - BEAR RIVER COMPACT

Water use and management in the Bear River Basin shall conform to the allocations set forth in the Bear River Compact [Idaho Code 42-3402].

Comment: The Bear River Compact has been in effect since 1958, and water allocations for the entire basin were adopted in 1978. The compact must be reviewed by the Bear River Commission at intervals of not less than twenty years and may be amended during the review process.

The goal of Idaho's representatives on the commission should be to recognize and promote the ground water management plan developed for the Bear River basin in Idaho and to move forward with the development of Idaho's depletion allocations in the Central and Lower Divisions.

6B - INTERSTATE WATER DELIVERY

Idaho water users in the Lower Division of the Bear River Basin must be protected from inequitable water allocation in the event of a water emergency and the scheduling of interstate water deliveries.

Comment: Article 4 of the Bear River Compact provides for the administration of the water in the Lower Division if the Bear River Commission finds that a water emergency exists. If a Utahwater user believes the flow of water in the Bear River is insufficient to satisfy their water right, due to diversions in Idaho that user may file a petition requesting water distribution under the direction of the Commission.

Water emergencies must be determined through comprehensive accounting processes and reflect true emergency conditions. Water emergencies should not be declared on an annual basis with the sole intent of advancing interstate water delivery. Idaho and Utah have developed separate but similar water accounting models that incorporate the rights identified in the Commission Approved Lower Division Water Delivery Schedule. The Commission has also adopted procedures for Lower Division Water delivery. Both Idaho and Utah can operate their respective accounting models each year and account for water use with the approved interstate water delivery schedule or including only their respective state water rights or both. Absent a Commission declared water emergency, Idaho water users are not obligated to the interstate accounting which determines their natural flow and storage use, however Idaho water users may voluntarily accept the interstate accounting allocations.

6C - BEAR LAKE

The outstanding values of Bear Lake are recognized and should be preserved while continuing to meet existing allocations for irrigation and hydroelectric power generation.

Comment: Bear Lake is a regional tourist attraction recognized for its unique water coloration and for its fishery. To protect these values, the Idaho Water Resource Board has obtained a minimum lake level water right for Bear Lake. The water right holds the lake elevation at or above 5902 feet.

The State of Idaho also recognizes and supports the Bear Lake Storage Allocation and Recovery Plan. This plan was approved through the Bear Lake Settlement Agreement of April 1995 and updated in 2003 as the established guideline for the operation of Bear Lake and the delivery of storage water. This document calls for a portion of the active storage in Bear Lake to be voluntarily retained to enhance recreation and water quality values.

Recent information indicates that the major contaminant problem in Bear Lake is suspended sediment. The primary source of suspended sediment is the Bear River during high flow periods when sediment-laden water enters Bear Lake through Mud Lake. The most effective way to further enhance the water quality of Bear Lake is to reduce the sediment load to the Bear River above Bear Lake.

6D - BEAR RIVER BASIN WATER PROJECTS

Additional projects for the development of the water resources of the basin without regard to state boundaries are encouraged.

Comment: The Bear River Compact provides for a signatory state to construct storage facilities in another state. In order to obtain the maximum beneficial use of water within the basin, it may be necessary to ignore state boundaries, providing that water rights generated by such projects comply with the basic allocations of the compact. The State of Idaho should participate with Wyoming and Utah in determining the feasibility of storage projects for use in Idaho.

6E - BEAR RIVER BASIN WATER MANAGEMENT

The board should evaluate options for additional management flexibility including a local rental pool.

The Idaho Water Resource Board is authorized by Section 42-1765, Idaho Code, to create a local rental pool to facilitate marketing of stored water by a local committee appointed to administer it. A rental pool provides the advantage of being locally managed and controlled, allows for the development of procedures adapted for conditions existing in the basin, protects unused water rights from forfeiture, and provides a source of funding for improving water management. The Department will facilitate creation of a rental pool.

7. Panhandle River Basins

7A - PANHANDLE BASINS

Ground and surface waters of the Idaho Panhandle should be managed to protect the economic and environmental quality of the region.

Comment: While appearing water rich in comparison to the rest of the state, the water resources of the Idaho Panhandle are finite, and in some areas are fully utilized. Water is the key to the continued economic development in the region. The Water Board places a high priority on maintaining the quality of the water resource base.

Proper management requires a full understanding and inventory of the resource characteristics and water supply. (WORK ON LANGUAGE.Address changing land uses from ag to residential.

7B - PANHANDLE MINIMUM FLOWS

Sufficient water should be provided to meet the minimum requirements for aquatic life, fish and wildlife, and to provide for recreation in the Panhandle Basins.

Comment: The minimum stream flow program provides the Idaho Water Resource Board with the authorities necessary to appropriate water for the purposes of this policy. Several streams in the Panhandle Basins have been examined and protected with minimum stream flows claimed by the Idaho Water Resource Board. As water consumption increases in the region, the minimum stream flow program will become increasingly important .

7C - PANHANDLE DCMI

Water should be available for new domestic, commercial, municipal and industrial uses.

Comment: The purpose of this policy is to recognize the future demand for DCMI (Domestic, Commercial, Municipal, and Industrial) development (As of 7/1/2006, the population of the 5 northern counties was 206,140 (U.S. Census)hh 2/19/0

7D - PANHANDLE AGRICULTURAL WATER

Water will be maintained to sustain existing and/or future irrigated agriculture in the Panhandle.

Comment: Agriculture is a major industry of the state, and Idaho provides an important share of the nation's food production. The Idaho Water Resource Board wishes to insure the availability of water for this purpose.

7E - PANHANDLE NAVIGATION

Where practical, water sufficient for commercial and recreational navigation should be maintained in the streams and lakes of the Idaho Panhandle.

Comment: The minimum stream flow program can be used to appropriate water to provide a minimum flow or lake level for the protection of navigation and transportation. Navigation interests are further protected in that all new water appropriations must be in the public interest and an adverse effect on navigation would rarely be in the public interest.

Pending discussion about navigation/Lime Point/Johnson Bar. hh 3/14/08

NEW POLICIES

WATER MARKETING POLICIES

It is the policy of the State of Idaho to study and implement new procedures for expanding opportunities to move water among DCMI sectors using voluntary mechanisms including markets.

It is the policy of the State of Idaho, for the purpose of improving water marketing, to analyze existing institutions including accounting, water trusts, dry-years options and opportunities for making substitutions between ground and surface water use.